REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 6, 7, 9-21, and 23-26 have been canceled, claims 1, 4, 8, and 22 have been amended, and claims 27 and 28 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-5, 8, 22, 27, and 28 are pending and under consideration.

CONCURRENTLY SUBMITTED INFORMATION DISCLOSURE STATEMENT:

In the concurrently submitted IDS, Applicants respectfully submit that JP 63-23206 corresponds with U.S. Patent No. 4,821,125 (Christensen et al.), which is also submitted in the IDS.

ALLOWABLE SUBJECT MATTER:

In the Office Action, at page 4, item 5, the Examiner indicated that claims 4, 5, 8, and 21-23 would be allowable if rewritten in independent form. Applicants respectfully submit that claims 4, 8, and 22 have been rewritten in independent form, and are now allowable. Further, Applicants respectfully submit htat claim 5, which depends from now-allowable, independent claim 4, is also allowable.

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 2, item 4, the Examiner rejected claims 1-3, 6, 7, 9-11, 17-20, 24-25 under 35 U.S.C. §103 (a) as being unpatentable over Madsen et al. (U.S. Patent No. 5,600,500 – hereinafter Madsen), in view of Fujiwara et al., (U.S. Patent No. 6,914,738 B2) – hereinafter Fujiwara. The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicants traverse this rejection and respectfully request reconsideration.

Amended, independent claim 1 recites: "...measuring a rate of errors while changing a recording parameter of the hard disk drive under a test condition corresponding to a desired operating temperature but maintaining a test temperature; selecting a recording parameter value corresponding to a smallest rate of errors under the test condition; and optimizing the recording parameter of the hard disk drive under the desired operating temperature using the selected recording parameter measured under the test condition corresponding to the desired operating temperature."

Madsen discloses a method of optimizing write current based on a measured bit error rate. More specifically, in FIGS. 2 and 3, and col. 7, line 11 to col. 9, line 18, Madsen discloses a method in which a write current is initially selected. Then, a series of operations is performed approximately 10 times. These operations include: writing background interference along a data track 50, but off-track with respect to the data track 50; writing data on the data track 50; writing adjacent track interference on adjacent data tracks 52 a and b; reading the data from data track 50; and measuring a bit error rate. Then, the lowest bit error rate is logged. Finally, an optimum current level is determined as a function of the logged soft error rates.

Regarding claim 3, contrary to the Examiner's assertion, Applicants respectfully note that Madsen does not disclose reading any data from adjacent data tracks 52a and b.

Fujiwara discloses a method of obtaining an optimum overshoot current and storing such in a delay table. At a plurality environmental temperatures, data is written and an error rate is measured at a plurality of overshoot current delays, until the measured error rate is greater than a reference error rate. Then, for the given temperature, the temperature/delay time pair is written to a table as the optimum delay time that gives the optimum overshoot current value at the given temperature. (See Fujiwara, at FIGS. 11 and 12, and col. 8, line 34 to col. 9, line 12).

But neither Madsen nor Fujiwara, either alone or in combination, disclose or suggest a method of determining optimized parameters suitable for several respective temperature conditions through a test in which a condition of the test is varied according to desired temperature conditions.

Accordingly, Applicants respectfully submit that independent claim 1 patentably distinguishes over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicants respectfully submit that claims 2, 3, 27, and 28, which ultimately depend from independent claim 1, should be allowable for at least the same reasons as claim 1, as well as for the additional features recited therein.

CONCLUSION:

In accordance with the foregoing, Applicants respectfully submit that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution

can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: December 12, 2005

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